



GENERATING MOMENTUM IN DIGITAL BUSINESS TRANSFORMATIONS

Ina. M. Sebastian, *Research Scientist*

MIT Center for Information Systems Research (CISR)

Thomas Haskamp, *Research Associate*, Hasso Plattner Institute,
University of Potsdam and *Research Collaborator*, MIT CISR

Nils O. Fonstad, *Research Scientist*

MIT Center for Information Systems Research (CISR)

Recent MIT CISR research suggests that digital business transformations may be beginning to stall. In 2017, companies in our research reported their transformations were 33 percent complete. Two years later, completion was at 50 percent. But in 2022, companies' transformations had progressed only to 55 percent complete.¹

A key challenge for digital leaders struggling to generate momentum—consistent, ongoing progress—in a transformation is motivating other business leaders at their company to commit to new goals and practices. To develop this commitment, digital leaders must overcome **organizational inertia**, which we define as *when organizations resist change by holding on to existing approaches that have proven successful*.

Organizational inertia is not inherently negative. It develops as a company creates value using established practices—for example, those it implemented to promote efficient operations. But when companies focus only on iterating existing successful practices rather than on exploring new ways to realize value using digital technologies, they risk losing value to disrupters that offer customers better or faster solutions to their needs.²

In this research briefing we aim to help leaders understand organizational inertia in digital business transformations. We propose three actions to generate momentum in transformations, and illustrate the actions using a case study from WABCO and ZF.

THREE SOURCES OF ORGANIZATIONAL INERTIA

Based on a review of empirical academic studies³ and interviews with executives,⁴ we identified three main sources of organizational inertia in digital business transformations:

1. **Enterprise-wide expectations** of what value the company can realize from digital technologies
2. **Organizational practices**, including structures, information systems, and networks of vested interests, that support how the company realizes value from digital technologies
3. **Investment allocation** that guides what practices the company will prioritize

Digital leaders experience organizational inertia as resistance to change. Recognizing the three sources of organizational inertia as obstacles to generating momentum in a digital business transformation helps leaders design actions to keep transformation efforts from stalling. The following example illustrates how digital leaders counter the sources of organizational inertia.

TRANSFORMATION JOURNEY AT WABCO AND ZF

WABCO Holdings Inc. (WABCO)⁵ was a US-based automotive technology supplier for medium and heavy commercial vehicles. In 2017, the company's newly appointed global CIO,

1 Based on responses to the MIT CISR 2017 Pathways to Digital Business Transformation Survey (n=413), the MIT CISR 2019 Top Management Teams and Transformation Survey (n=1,311), and the MIT CISR 2022 Future Ready Survey (n=721). We asked companies to assess how far along they were in their digital business transformation (their percentage complete) based on what they had proposed to the board. See Stephanie L. Woerner, Peter Weill, and Ina M. Sebastian, *Future Ready: The Four Pathways to Capturing Digital Value* (Boston: Harvard Business Review Press, 2022).

2 Academics have explored organizational inertia challenges in research publications such as Clayton M. Christensen, *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail* (Boston: Harvard Business School Press, 1997) and James G. March, "Exploration and Exploitation in Organizational Learning," *Organization Science* 2, no.1 (February 1991): 71–87.

3 Thomas Haskamp, an author of this briefing, led this review and the research interviews as part of his dissertation research at the University of Potsdam. See Thomas Haskamp, Christian Dremel, Carolin Marx, and Falk Uebernickel, "Understanding Inertia in Digital Transformation: A Literature Review and Multilevel Research Framework," *ICIS 2021 Proceedings on the International Conference on Information Systems (ICIS)*, 5.

4 For this research on organizational inertia, Thomas Haskamp conducted 148 interviews with seventy-one executives at three companies, including WABCO Holdings Inc./ZF Group, between 2021 and 2023. Haskamp and Ina Sebastian conducted 4 additional interviews with some of the executives in 2022 and 2023.

5 This case study on WABCO and the ZF Commercial Vehicle Solutions (CVS) division is based on 29 interviews with fifteen executives at WABCO and ZF CVS in 2020, 2022, and 2023.

Milan Kumar, set a new strategic goal for the IT department to generate \$20 million in business savings and sales growth for the company by 2020 through innovation by deploying a selection of twenty digital technologies. To realize this goal, he established both a transformation steering committee and five IT labs—dedicated innovation teams that would take charge of filling the innovation pipeline.⁶ He situated the labs at production plants to kick-start collaboration and showcase digital technologies in the business context. The company's CEO inaugurated the first lab.

But despite the visible support from the CEO, the transformation stalled. The IT labs struggled to engage business leaders and secure additional funding. Business leaders expected IT to provide digital services that would help the business operate better and cheaper, but they were not willing to invest in new initiatives that had uncertain outcomes.

One reaction from the business side was, it's great that you're doing this now, but I have another change in SAP that has not been implemented. It would be nice if someone did that before you create new things that don't add any value for me.

CHRISTIAN LÜHRIG, BUSINESS ALIGNMENT LEADER IT, WABCO

We identified three main sources of organizational inertia in digital business transformations: enterprise-wide expectations, organizational practices, and the organization's investment allocation.

Generating Momentum at WABCO

The IT labs got more traction with business leaders once the labs partnered with the company's Six Sigma unit; because the unit worked directly with the businesses, it understood their needs and saw digital technologies as a new way to generate savings. IT and Six Sigma leaders established a digital transformation office to coordinate their units' activities. The IT labs refocused their communications with the businesses from technology to how the labs could address business problems, pitching digital initiatives—such as implementing robotic process automation—from which business leaders could quickly realize value.

These actions triggered growing interest in the IT labs' efforts, and requests for pilot initiatives. To handle the demand, CIO Kumar and his team created new practices aimed at collaboration—for example, a committee composed of business, IT, and Six Sigma leaders that jointly approved projects for the next stage of development. IT and Six Sigma developed a tool they called the Digital Diary to automate the approval process and serve as a dashboard tracking all activities and demonstrating value. Kumar also changed IT's annual budgeting practices both to make funding available to the labs throughout the year, rather than once a year, and to fund collaborative initiatives until they produced a minimum viable product (MVP).

Within one year of starting the transformation, the IT labs had completed seventy-five projects and realized \$4 million in savings. By 2020, they were well on the way to reach the strategic goal of \$20 million, having realized \$16 million in business savings and sales growth from digital innovations—such as the deployment of close to two hundred seventy automated bots in the production environment.

Applying Learnings in ZF's Transformation

In 2020, WABCO was acquired by ZF Friedrichshafen AG (ZF Group, or ZF), a global automotive technology supplier that at the time had 153,500 employees, 189 production locations in 31 countries, and sales of €32.6 billion.⁷ In 2022, ZF launched the Commercial Vehicle Solutions (CVS) division, combining the company's Commercial Vehicle Control Systems (formerly WABCO) and Commercial Vehicle Technology divisions, and appointed Milan Kumar, who had joined ZF during WABCO's acquisition, to be CIO of the division.

Kumar had the support of ZF's management board to recreate the success of WABCO's IT labs at the CVS division at a larger scale and scope. To accomplish that, he sought to build the momentum he and his team had generated at WABCO, setting strategic goals for CVS's IT team and designing practices based on principles of collaboration, self-organization, and transparency.

To encourage collaboration between the CVS IT team and the rest of the division, the CIO chairs a steering committee of six business leaders that meets monthly and tracks the strategic impact of digital initiatives and identifies new opportunities. The IT labs initiated a collaboration with CVS's Digital Process Organization unit (DPO) to leverage the unit's insight into

⁶ Each IT lab focused on one of five areas: digital, data, smart factory, digital workplace, and start-ups and university collaborations.

⁷ ZF Friedrichshafen AG, *ZF Annual Report 2020*, from the ZF website, December 31, 2020, pp. 2 and 64, https://www.zf.com/master/media/en/corporate/m_zf.com/company/bonds_relations_financial_reports/annual_report/2020_2/ZF_AnnualReport20.pdf.

current processes and its collaboration with the businesses. Leaders from IT, DPO, and divisional strategy colead the CVS Digital Transformation Office, which coordinates digital innovation activities and extends into each of eleven business areas through digital champions and process experts.

The IT labs self-organize to identify new opportunities, promote digital initiatives, recruit pilots and fund them up to the MVP stage, scale pilots with businesses, and upskill colleagues.

To prove value and earn trust in new practices through transparency, CVS uses the Digital Diary tool that WABCO developed. The tool serves as a one-stop portal to run innovation projects and track opportunities, estimated value, maturity level, and value realized (e.g., cost savings) in dashboards.

The transformation is gaining momentum. By the end of 2022, the IT labs had delivered fifty-five digital campaigns, including hackathon-inspired “Botathons” and “Datathons,” in which teams solved business problems. Additionally, eighty-four digital projects had been deployed in the businesses, ranging from a production early warning system to automations in integrated supply chain and human resources.

Figure 1: Three Actions that Generate Momentum in Digital Business Transformations



THREE ACTIONS THAT GENERATE MOMENTUM

In our research interviews, digital leaders described three actions that counter the sources of organizational inertia to generate momentum in digital business transformations (see figure 1):

1. **Reframe expectations.** By communicating opportunities in new ways and focusing on the businesses' needs, digital leaders helped other business leaders understand how digital technologies enable a broader set of objectives. Digital leaders at WABCO and ZF CVS identified stakeholder groups in the organization to collaborate with—those with a richer understanding of the businesses, an appreciation for how digital can address business needs, and an appreciation of iterative learning. In a manufacturing company, process experts were a natural fit.

Digital leaders in our study created momentum in transformations with three actions that counter resistance to change: reframing expectations, practicing collaboration, and proving value.

2. **Practice collaboration.** By introducing new ways of working, digital leaders challenged embedded organizational structures and siloed practices that had been optimized for incremental improvements. ZF CVS's CIO designed IT practices that are collaborative to engage other leaders in the business, build commitment, and learn together, using a steering committee, a transformation office, IT labs that actively recruit projects, and a process for running innovation projects that involves all stakeholders.

3. **Prove value.** By offering outcomes-based collaboration focused on value realization, digital leaders earned trust in new practices and changed other business leaders' willingness to allocate investments to innovative initiatives. At ZF CVS, digital leaders fund pilots until an MVP is developed, and use Digital Diary to track value and continuously learn.

The leaders in our research started small with a few pilots, demonstrated that they realized value, and scaled them with growing commitment from the business. As a leader experiencing resistance to change, you need to develop new approaches to manage the expectations of the organization, encourage cross-functional collaboration, and prove the value of your strategy.

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MIT Sloan School of Management
Center for Information Systems Research

245 First Street, E94-15th Floor

Cambridge, MA 02142

t 617-253-2348 | e cisl@mit.edu

cisl.mit.edu |  

Team | Isobela Byerly-Chapman, Margherita Di Pinto, Christine G. Foglia *Associate Director*, Nils O. Fonstad, Dorothea Gray-Papastathis, Cheryl A. Miller, Ina M. Sebastian, Alan Thorogood, Nick van der Meulen, Austin Van Groningen *Engagement Director*, Peter Weill *Chairman Emeritus*, Barbara H. Wixom, Stephanie L. Woerner *Director*